

Chief Patrons

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Hon'ble Chancellor, REVA University

Sri. Umesh Raju
Pro Chancellor, REVA University

Patrons

Dr. M. Dhananjaya
Vice Chancellor, REVA University

Assoc Prof. Dr. Raman Bin Noordin
Deputy Vice Chancellor (Student Affairs and Alumni),
Acting Vice-Chancellor, Universiti Malaysia Sabah

Prof. Dr. Mohammed Saffree Jeffree
Dean, Faculty of Medicine and Health Sciences, Universiti
Malaysia Sabah

Dr. N. Ramesh
Registrar, REVA University

Dr. Rajashekhar C Biradar
Pro Vice-Chancellor (Engineering)

Dr. Vidya Shankar Shetty
Pro Vice Chancellor (Strategies and Planning)

Conveners

Prof. Shilpa B. R
Deputy Director, School of Applied Sciences, REVA University

Prof. Ts. Dr. P Visweswara Rao
Former Research Coordinator, UMS & Director, International
Relations and Research Collaborations, REVA University.

Prof. Ts. Dr Zainul Amiruddin Zakaria
Faculty of Medicine and Health Sciences,
Universiti Malaysia Sabah

Co-Conveners

Dr. Madhusudana Reddy M B
Head - Department of Chemistry, School of Applied Sciences,
REVA University.

Dr. D.V Sunitha
Head - Department of Physics, School of Applied Sciences,
REVA University

Dr. Vishu Kumar
Head - Department of Mathematics, School of Applied
Sciences, REVA University.

Dr. Jayashree S
Head - School of Allied Health Sciences, REVA University

Dr. P. Ramachandra
Dean, School of Applied Sciences, REVA University

Organizing Secretary

Prof. Prashantha C.N
Assistant Professor, Department of Biotechnology,
School of Applied Sciences, REVA University

Associated collaborations



**University of
Nottingham**
UK | CHINA | MALAYSIA



USM UNIVERSITI
SAINS
MALAYSIA



الجامعة الإسلامية العالمية ماليزيا
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
يُونِيسْتِي إِسْلَامِيَّةُ إِنْتَرَاكِسِيَا مَلَيْسِيَا
Garden of Knowledge and Virtue



REVA
UNIVERSITY

Bengaluru, India



UMS
UNIVERSITI MALAYSIA SABAH

2nd International conference

on

**“Global Trends in Applied Sciences,
Medical and Health Sciences”**

28th to 29th October 2022

Organised by
School of Applied Sciences, REVA University
in collaboration with
Faculty of Medicine and Health Sciences,
Universiti Malaysia Sabah

Conference Venue

School of Applied Sciences, REVA University,
Bangalore-560 064, Karnataka, India.

Rukmini Knowledge Park,
Kattigenahalli, Yelahanka, Bengaluru-560064
Phone: +91-80-66226622

Rukmini Educational
Charitable Trust

www.reva.edu.in

About REVA University

Established under the REVA University Act 2012, the University is recognized by the University Grants Commission (UGC) and is approved by the AICTE (All India Council for Technical Education).

REVA University prides itself in contributing to every student's holistic development. The University currently offers 39 fulltime Under Graduate Programmes, 32 full-time Post Graduate programmes, 18 PhD programmes, and certification and diploma programmes. The University offers programmes in Engineering, Architecture, Science and Technology, Commerce, Management Studies, Law, Arts & Humanities, and Performing Arts and Indic studies. Courses are offered in Certificate/Diploma and Post Graduate Diploma too. REVA University facilitates research leading to a Doctoral Degree in all disciplines. The programmes offered by REVA University are well-planned and designed based on methodical analysis and research with emphasis on knowledge assimilation, practical applications, hands-on training, global and industrial relevance, and their social significance. Teachers and instructors with illustrious academic experience are the architects of the meticulously designed curriculum and program modules offered at REVA University. They come with industrial exposure and experience that often translates through their teaching, thus bridging the gap between the industry and academia.

REVA University has an updated, ever-evolving collection of books, journals, and digital content in the library with the latest IT infrastructure that ensures students have information at their disposal. The lush green campus, state-of-the-art laboratories, custom-designed classrooms to enable seamless learning, and world-class indoor and outdoor sports facilities make REVA University the most preferred university among students and MNCs that visit the campus for placements.

About School of Applied Sciences

The School of Applied Sciences is shouldered by well qualified, experienced, and highly committed faculty. The state-of-the-art infrastructure facility with digital classrooms, well equipped laboratories, conference rooms and the serene academic atmosphere at REVA University will enhance the transfer as well as creation of knowledge. The school has collaborated with reputed industries and research organization to provide skills sets required for student community. The school aims to develop a learning community with critical thinking capacity to solve problems with innovative research ideas. School of Applied Sciences is actively involved in research and

published many peer reviewed articles in National and International Journals related to domain of Biotechnology, Biochemistry, Chemistry, Physics and Mathematics. The School has also published many patents and received grants from various funding agencies like DST, DBT, VGST, ICMR etc.,

About the 2nd International Conference

School of Applied Sciences, REVA University welcomes you to the 2nd International conference on “Global Trends in Applied Sciences, Medical and Health Sciences” on 28th and 29th October 2022 at REVA University, Bangalore. The international conference has been specifically designed with the intention of delivering outstanding outcomes and challenges in the Physical, Chemical, Mathematical, Biological, Medical and Health Science sectors. It intends to bring collectively researchers, scientists, technicians, and scholars in all fields of the applied sciences, medical and healthcare sector, for the propagation of original research conclusions, new approaches and developmental practices that yield real results. The conference theme “Global Trends in Applied Sciences, Medical and Health Sciences (ICGTAMH-22)” is dedicated to bring together a significant number of diverse scholarly events for presentation within the specified domains of conference. Participants will have an opportunity to interact with leading experts from their respective fields to bestow their research plans in different countries. With eminent International and National Speakers, the conference provides an exceptional value for students, academics, and industry experts and researchers. The conference aims to bring together leading scientists, researchers, and research scholars to exchange and share their experiences and research results on all aspects science. It also provides an interdisciplinary platform to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered, and solutions adopted in the fields of Life Science, Chemical & Physical sciences and Medial Sciences.

Objectives of the 2nd International Conference

To provide an international forum to exchange information, share experiences and research results from various specialized and interdisciplinary fields in Applied and Medical sector. To bring academicians, leading researchers, scholars as well as innovative practitioners from industry, onto common platform to share research knowledge, skills, and insights into promoting research and innovations. To provide a platform for participants to establish professional networks in their respective fields and to enhance collaborative research

About Universiti Malaysia Sabah and Faculty of Medicine and Health Sciences

Universiti Malaysia Sabah (UMS) is a public University in Malaysia. It was officially established on 24 November 1994 as the ninth public University in the country. The University is located on a 999-acre site at Sepanggar Bay in Kota Kinabalu in the Malaysian state of Sabah. With Mount Kinabalu and the South China Sea as its background, UMS is often considered as among the most beautiful campuses in Southeast Asia.

The Faculty of Medicine and Health Sciences (FMHS) was established in 2003 with the primary aim to increase the number of medical doctors, nurses and other health professionals, especially in Sabah, to meet the increasing demand for such personnel in Malaysia. The main objective of the faculty is to produce committed and concerned medical and health professionals who are sensitive to the health needs of the communities, with emphasis to their total wellbeing within their cultural and traditional orientation.

The Faculty of Medicine and Health Sciences is steadfast in its quest to achieve excellence in medical and health education, which is geared towards producing competent graduates capable of contributing productively through adoption of best practices in health care at community, national and the International level. Postgraduate programs and research are niche areas of the faculty which emphasizes on fundamental and advanced research in the fields of biomedical sciences, clinical and public health medicine.

The faculty also involves in community related projects and research which help the public directly. The faculty members excel in networking and collaboration nationally and internationally in academics and research.

Conference Topics

Physics	
Laser Science and Technologies	Nano and Bio Photonics
Luminescence-Materials and Applications	Carbon-based materials
Radiation effect on materials	Ceramics
Dielectrics and Ferroelectric Materials	Thin Films and Related Technologies
Photovoltaic Materials and Cells	Materials for space applications

Biotechnology	
Microbial Technology	Biopharmaceutical and drug discovery
Regenerative medicine and Stem Cell Biology	Nano-biotechnology
Agricultural Biotechnology	Cancer Biology and therapy
Genetics and Molecular Biology	Environmental bioremediation
Toxicology & Animal studies	Antimicrobial peptides and therapies
Immunology	Vaccine development
Developmental biology	Computational Biology and Bioinformatics
Genomics and Proteomics	Molecular pharmacology
Biomedicine	Nanotechnology & Drug development
Infectious Diseases	Health and Disease Management
Biochemistry	
Environmental sustainability	Clinical Research
Production of value-added products	Antibiotic resistance
Pharmacology	Food and Nutrition
Chemistry	
Green Chemistry	Medicinal Chemistry
Total Synthesis	Crystallography
Polymorphism	Catalytic Materials for Energy
Batteries	Sensors
Environment	Nanomaterials
Self-Assembly	Polymer Chemical biology
Electro kinetics	Organic Electronics
Reverse Osmosis	Nano Filtration & Ultra Filtration membrane
Mathematics	
Fluid Dynamics	Graph Theory
Operation Research	Geometry
Algebra	Differential Equations
Complex Analysis	Number Theory

Organising Committee
<ul style="list-style-type: none"> Dr. Senthil Kumar R, Associate Professor, DBT - Ramalingaswami Re-entry Fellow, Department of Biotechnology, REVA University. Dr. V. Damodara Reddy, Associate Professor, Ramanujan Fellow, Department of Biotechnology, REVA University. Prof. Renuka Madhu, Associate Professor, Department of Biotechnology, REVA University. Dr. Mahipal Ranot, Associate Professor, Department of Physics, REVA University. Dr. Mahendra K, Assistant Professor, Department of Physics, REVA University. Dr. Veeraraghavan V, Professor, Department of Biochemistry, School of Allied Health Sciences, REVA University. Prof. Prashanth V Mangalvedhe, Assistant Professor, Department of PBT, School of Allied Health Sciences, REVA University. Dr. Elaine Ammini Sabu, Department of Biochemistry, School of Allied Health Sciences, REVA University. Dr. Nik Soriani Yaacob, Professor, School of Medicine, Universiti Sains Malaysia. Dr. Nagendra G, Associate Professor, Department of Chemistry, REVA University. Dr. Ashoka S, Assistant Professor, Department of Chemistry, REVA University. Dr. Nagaraju D.H, Professor, Department of Chemistry, REVA University. Dr. Hanumagowda B N, Professor, Department of Mathematics, REVA University. Dr. Udaya Kumara K N, Professor, Department of Mathematics, REVA University.
National and International Advisory Committee
<ul style="list-style-type: none"> Professor Datuk ChM Ts Dr Taufiq Yap Yun Hin , Ex-Vice Chancellor, Universiti Malaysia Sabah Dr. Bony De Kumar, Director of Operations, Yale Genome Analysis Center, Yale University, Connecticut, USA.

<ul style="list-style-type: none"> Dr. John D. Imig, Ph.D. Director, Drug Discovery Center, Professor & MCW Eminent Scholar, Medical College of Wisconsin Milwaukee, WI 53226. Prof. Jagadeesh Rajenahally, Group Leader “Synergy between Homogeneous and Heterogeneous Catalysis”, Leibniz Institute for Catalysis, Rostock, Germany. Dr. Balasundaram Muthuvenkatachalam, Professor, Biochemistry and Nutrition Unit, Faculty of Medicine, AIMST University, Malaysia. Dr. Rakesh Kumar Arya, Scientist, Cleveland Clinic, Ohio, United States. Dr. Juliana Heloisa Pinê Américo-Pinheiro, Professor, Brazil University, Sao Paulo, Brazil. Dr. Nellaiah Hariharan, Head, R & D and Training, Bangalore Biotech Labs. Pvt. Ltd. (BiOZEEN) Bengaluru, Karnataka, India Dr. Chandrabhas Narayan, Director, Rajiv Gandhi Center for Biotechnology, Thiruvananthapuram, Kerala Dr. Pavan Kumar, Senior Scientist, Chemistry & IP, CSIR- Institute of Minerals and Materials Technology (IMMT),Bhubaneswar Dr. K Madhavi, Professor, and Head, Department of Biochemistry, ACSR Medical College, Nellore, Dr NTR Health University of Sciences, Prof Kondaiah, Emiretus Professor, Indian Institute of Sciences (IISc), Bangalore Dr. A.K. Sukla, Former Director, Cecri, Karikudi & Emeritus Processor, Solid State and Structural Chemistry Unit, IISc, Bangalore Prof. Dr. Sreeramanan Subramaniam, Professor, School of Biological Sciences & Centre for Chemical Biology (CCB),Universiti Sains Malaysia (USM), Penang, Malaysia Dr. Kumar Kothapalli, Dell Medical School, The University of Texas at Austin, USA Dr. B Srinath, Institute of Genetics, Osmania University, Hyderabad Assoc Prof Dr. Azham Bin Zulkharnain, Shibaura Institute of Technology, Japan Assoc Prof Dr. Mah Siau Hui, Taylors University, Malaysia Assoc Prof Dr. Worapon Kiattittipong, Faculty of Engineering and Industrial Technology, Silpakorn University, Nakhon Pathom, Thailand Dr. Lim Jun Wei, Universiti Teknologi PETRONAS, Malaysia

Guest of Honor

28th October 2022

Title of the talk

Next Generation Antibiotics



Prof. Dr. Ada E. Yonath

Nobel Laureate

Director, The Helen and Milton A. Kimmelman Center
for Biomolecular Structure and Assembly, Chemical
and Structural Biology Department, Weizmann
Institute of Science, Rehovot, Israel

Keynote Address

Title of the talk

Latest Developments in Microalgae
Biorefinery

Prof. Is. Ts. Dr. Pau-Loke SHOW

Professor of Biochemical Engineering,
Department of Chemical and Environmental
Engineering, Faculty of Science and
Engineering, University of Nottingham
Malaysia



Invited Speakers

Title of the talk

Comparative effects of LEDs on the
plant growth, physiological and
production of secondary
metabolites

Prof Dr Sreeramanan Subramaniam

School of Biological Sciences, Universiti Sains
Malaysia



Title of the talk

Role of Honey and its chemical
constituents on Neuroprotection

Prof. Dr. K.N.S. Sirajudeen

Professor,
Head, Kuliyah of Medicine, International
Islamic University Malaysia, Malaysia



29th October 2022

Title of the talk

Batteries for a sustainable world

Dr. A.K.Shukla

Former Director, Cetri, Karaikudi. & Emeritus
Processor, Solid State and Structural Chemistry
Unit, Indian Institute of Science, Bangalore



Title of the talk

Population genomics and public health

Dr. Kumarswamy Thangaraj

Director, Centre for DNA Fingerprinting and
Diagnostics (CDFD), Principal Investigator,
National Genomics Core (NGC), Hyderabad
500039, Telangana, India



Title of the talk

Sweet revenge: role for SWEET class
of sugar transporters in plant defense
and combined stress responses

Dr. Muthappa Senthil-Kumar

Staff Scientist-V, National Institute of Plant
Genome Research, New Delhi, India



Title of the talk

Tailoring the material properties
by inducing an ion beam

Dr. Fouran Singh

Scientist - G
Materials Science Group
Inter-University Accelerator Centre (IUAC)
New Delhi



Invited Speakers



Title of the talk

Life Style changes mediated Degenerative diseases

Dr. P. Kalaiselvi

Professor and Head
Department of Medical Biochemistry,
University of Madras, Chennai, Tamilnadu,
India



Title of the talk

Polymers - A unique class of molecular materials

Dr. S. Ramakrishnan

Professor
Department of Inorganic and Physical
Chemistry, Indian Institute of Science,
Bangalore, Karnataka

Call for Research Abstract

Research abstracts, broadly within the scope of the conference thematic areas, written in English language (250 words), are solicited with declaration of originality. Abstracts may be submitted electronically during the registration. Abstracts will be published in the conference compendium. The abstract proposal should explain the topic of your presentation, and describe why the material, research, practice, outcomes of the research. Abstract proposals will be evaluated through a blind peer review and best selected abstracts will be considered for conference compendium.

Abstract submission deadline: 15th October 2022.

Confirmation of Selected Abstracts: 20th October, 2022.

Email your abstract to: conference.soas@reva.edu.in

Call for Oral presentations

Oral presentations are given at the venue of the event. The presenter is physically present to deliver a verbal presentation to the audience. Most of the presenters choose to supplement their speech with a series of slides.

Presentation preparation checklist

- Each speaker will be given 15 minutes for oral presentation using Microsoft Power Point (including Q & A session).
- Submit the final copy of the presentation by the deadline given to you by the organizers
- Be on-site and available at least 30 minutes before your presentation
- Have a copy of your presentation on a USB device
- Ensure your presentation is compatible with a Windows operating system. Should your presentation require any specific technical set-up (e.g. Different operating system), contact the organizers with your needs and make sure you get a confirmation that the needs can be accommodated
- Label the presentation on your device with your name, presentation day, and time.
- Please note that technical issues may arise on-site before, during, or after your presentation. While the organizing committee goes above and beyond to make sure this doesn't happen, in the event that it does, the organizing committee cannot be held responsible.

Call for Poster presentations

Any poster presentation that is broadly within the scope of the conference thematic areas. Poster sessions are an informal format for presenting research data or highlighting innovative practices. In the research category, you are encouraged to present any current research. Research is a broad category and can include many types of methodologies, such as experimental research, applied research, program evaluations, or literature reviews addressing research questions. In the practice category, you are encouraged to highlight any innovative practice or intervention. You can share preliminary results or final outcomes for the practice. You can share preliminary results or final outcomes for the practice.

Those interested in presenting must submit a

- (a) 8-10-word title,
- (b) a 25-50-word abstract of their presentation
- (c) a one to two-page summary of the presentation, and
- (d) 2-5 keywords describing your poster.

You will also include the category of poster, primary presenter's name, address, phone number, e-mail, place of employment, and name of additional presenters, all suitable for printing in the conference program.

Poster Size: 90cm Width X 120cm Height

Poster submission deadline: 15th October 2022.

Confirmation of Selected Posters: 20th October, 2022.

Email your poster content to: conference.soas@reva.edu.in

Recognitions

The purpose of the Awards is to recognize and promote quality contributions to academic research and writing among scholars and students who present papers or posters at the ICGTAMH-2022 conference. The awards are given to the three most outstanding researchers of the conference under below categories.

- **Best Student Paper Presentation Award**
- **Best Researcher Paper Presentation Award**
- **Best Student Poster Presentation Award**
- **Best Researcher Poster Presentation Award**

Important Dates

Registration Open	01 st October 2022
Last Date for registration	25 th October 2022
Abstract/ Oral Presentation/Poster Submission Last date	15 th October 2022
Confirmation of selected abstracts/ Oral/ Poster date	20 th October 2022
Conference Date	28 th to 29 th October 2022

Conference Mode

The ICGTAMH-2022 Conference will be held in the hybrid mode: **online** and **offline (Face to Face)** in REVA . The authors of accepted papers will have a choice to present their papers on-line, or on site in REVA. All accepted papers, irrespective of the presentation mode, will be included in the conference proceedings released to all participants and submitted within a month after the conference through digitally.

Registration details

- Conference is conducted through **online** and **offline** mode.
- Online link** will be shared to the registered participants during the day of conference.
- If you are Oral Presenter or as a Poster presenter you should register as a delegate/student.
- If you are a only participant you should register as an attendee.
- The registration fee is based on your citizenship, not nationality.
- Please go through the following table before you register. We have structured a comprehensive price table for providing you with the best returns from the conference.
- E-certificate will be provided to the online participants
- Participants Interested for Oral and Poster Presentations can come for offline mode only (No Online option)**

Registration Fees

Participants from Industry	INR 3000
Teaching/ Research Professional	INR 2000
Research Scholars/JRFs/RA Students	INR 1500
PG / UG Students	INR 1000
Foreign Faculty/ Industry participants	USD 150
Abroad Student Participation	USD 100

Application form

<https://forms.gle/cUpoabUrrwSp8YxCA>

- E-Certificates will be Provided to the online Participants
- Session Link will be Shared with all online Registered Participants Through E-Mail or WhatsApp group.

Online Fees Payment

Internet banking / NEFT details:

Name: REVA UNIVERSITY

Bank and Branch: THE KARNATAKA BANK LTD,
REVA University Branch

Account No.: 6662500101008701

IFSC CODE: KARB0000666

SWIFT CODE: KARBINBBNG

Online Payment: <https://payment.reva.edu.in/>

(Pay using PayPal, Gpay, PhonePe, Paytm)

Note: Kindly mention the online transaction reference number in the registration form

Refund option: If the registrant participant is unable to attend the conference, no refund option to any of the participant.

Accommodation

Accommodation facility at REVA Hostel on chargeable basis is available for participants. Contact Dr. Majji Rambabu (+91-7569888964) for more information.

COVID Protocols Instruction

All participants are required to get two dose vaccination and Mask is compulsory. Adhere to the COVID appropriate protocol.

Note

The organizing committee is not responsible for any financial transaction the participants. The payment towards your accommodation and travel should be borne by the participants. All expenditure pertaining to the accompanying person should also be borne by the participant.

For further details, please contact

Prof. Prashantha CN

Organising secretary

ICGTAMH-2022

Assistant Professor

Department of Biotechnology, School of Applied Sciences,
REVA University

Email: conference.soas@reva.edu.in

Mobile: +91-9844158444

Conference registered Participants Can Join WhatsApp Group

<https://chat.whatsapp.com/F2q4uy2A723JLFKAnh2IaK>

